



MEASURES OF RIVER BASIN MANAGEMENT PLANS FOR MITIGATING AGRICULTURE IMPACTS TO WATER QUALITY

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EU LIFE Programme integrated project

“Implementation of River Basin Management Plans of Latvia towards good surface water status”

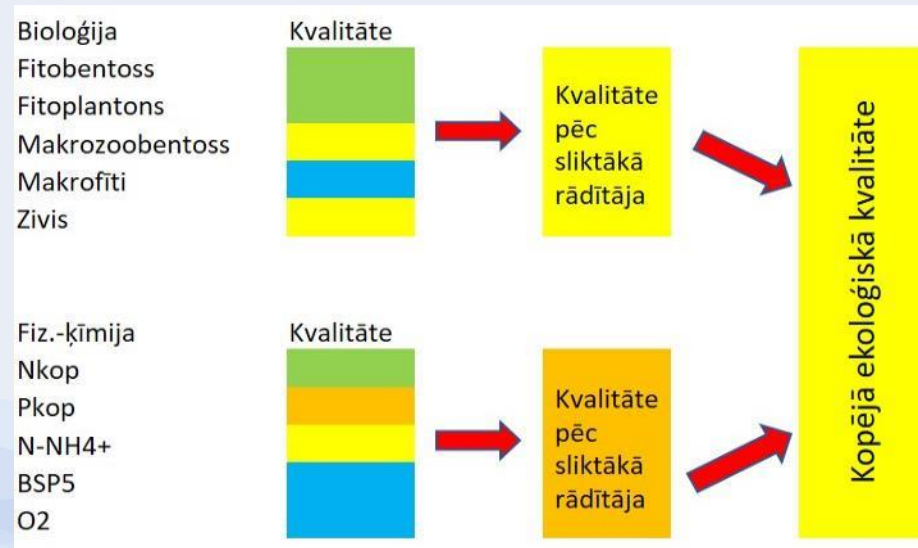


RIVER BASIN MANAGEMENT PLANS AND ECOLOGICAL WATER QUALITY

3rd cycle RBMPS approved!

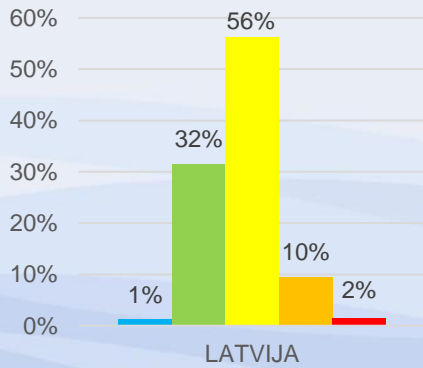
Ecological quality:

- Physico-chemical quality
- Biological quality
- Hydromorphological quality

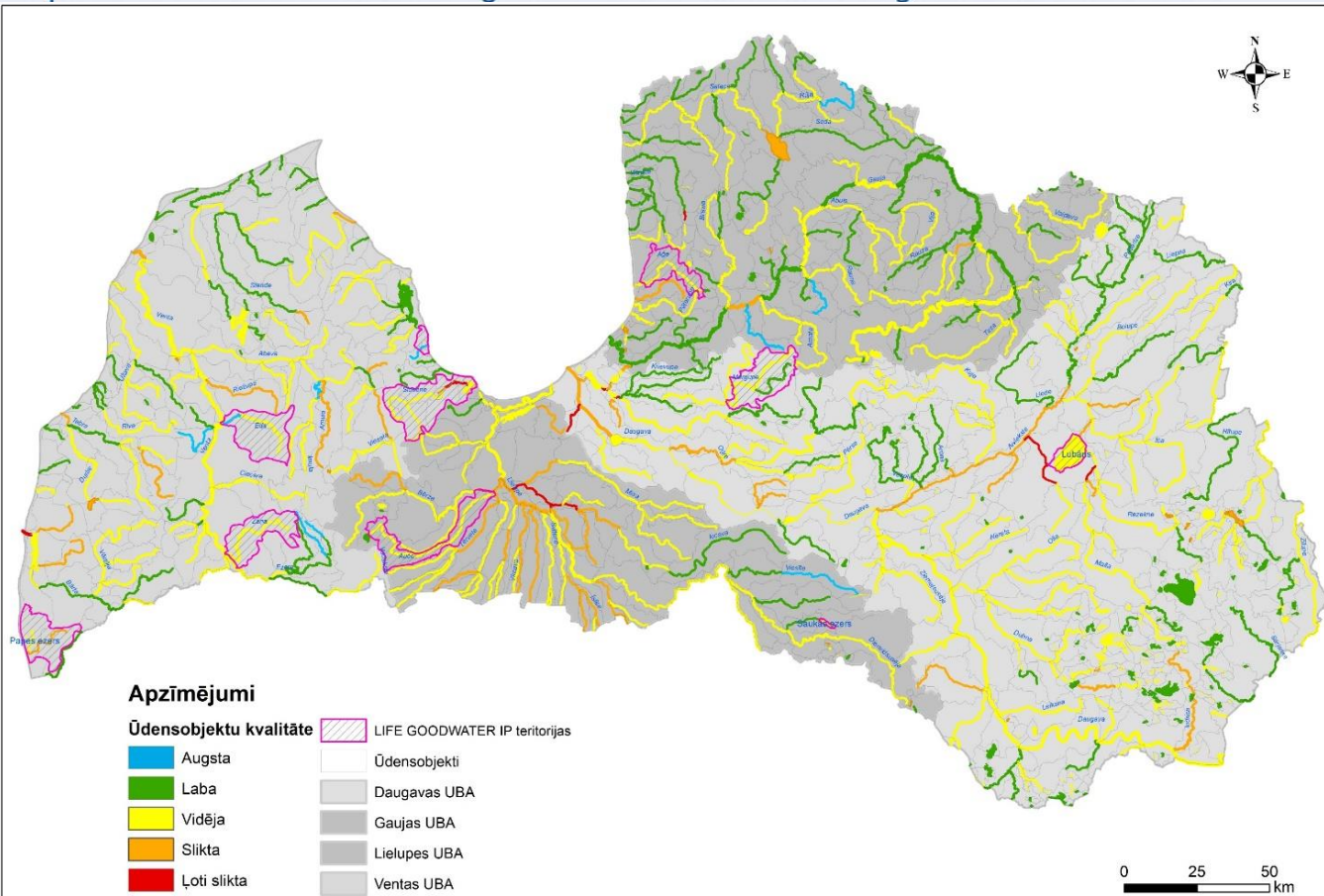


Example of assessment process for ecological quality

ECOLOGICAL WATER QUALITY IN 2020

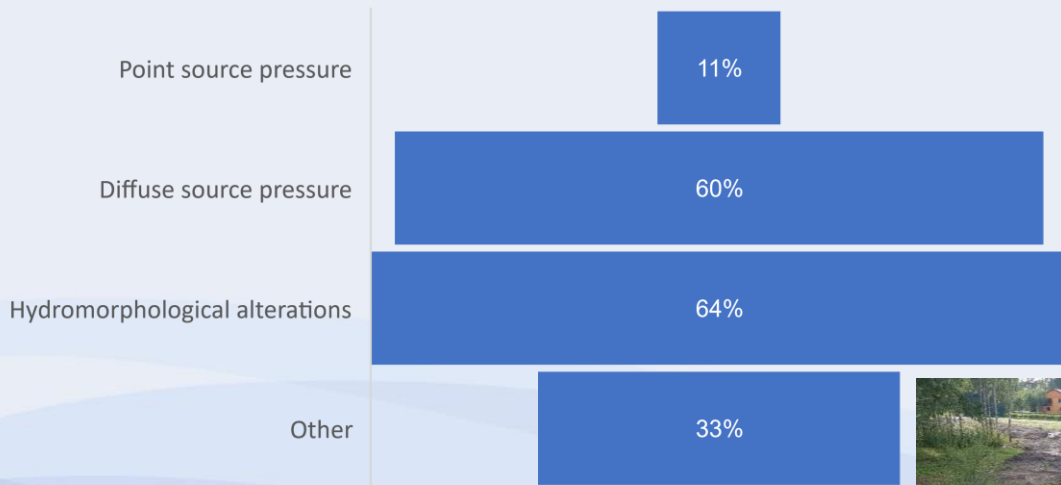


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SIGNIFICANT PRESSURES IN 3rd CYCLE RBMPs

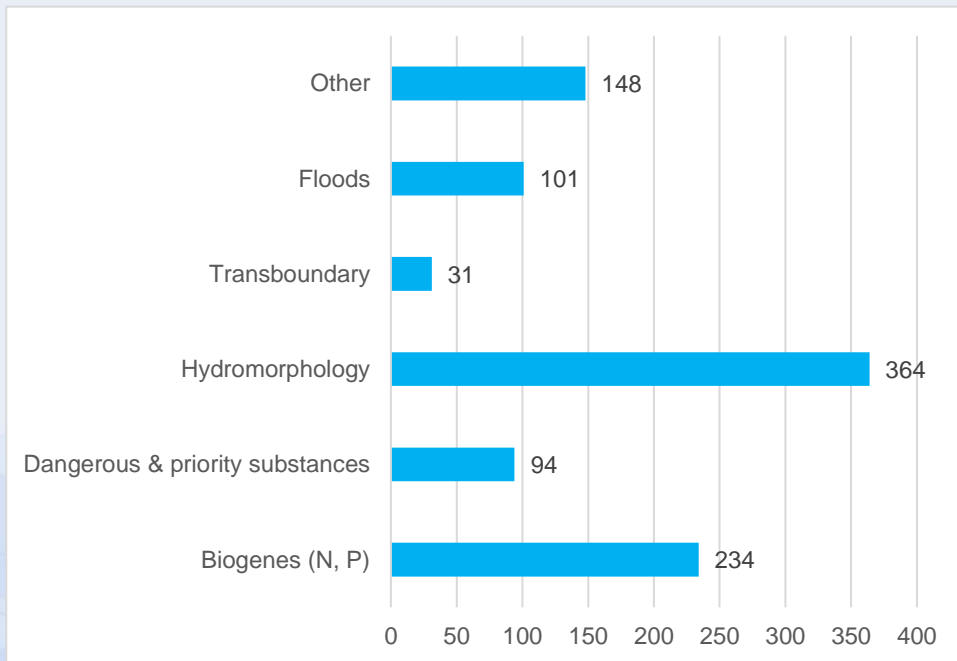
Significant pressures in impacted WBs



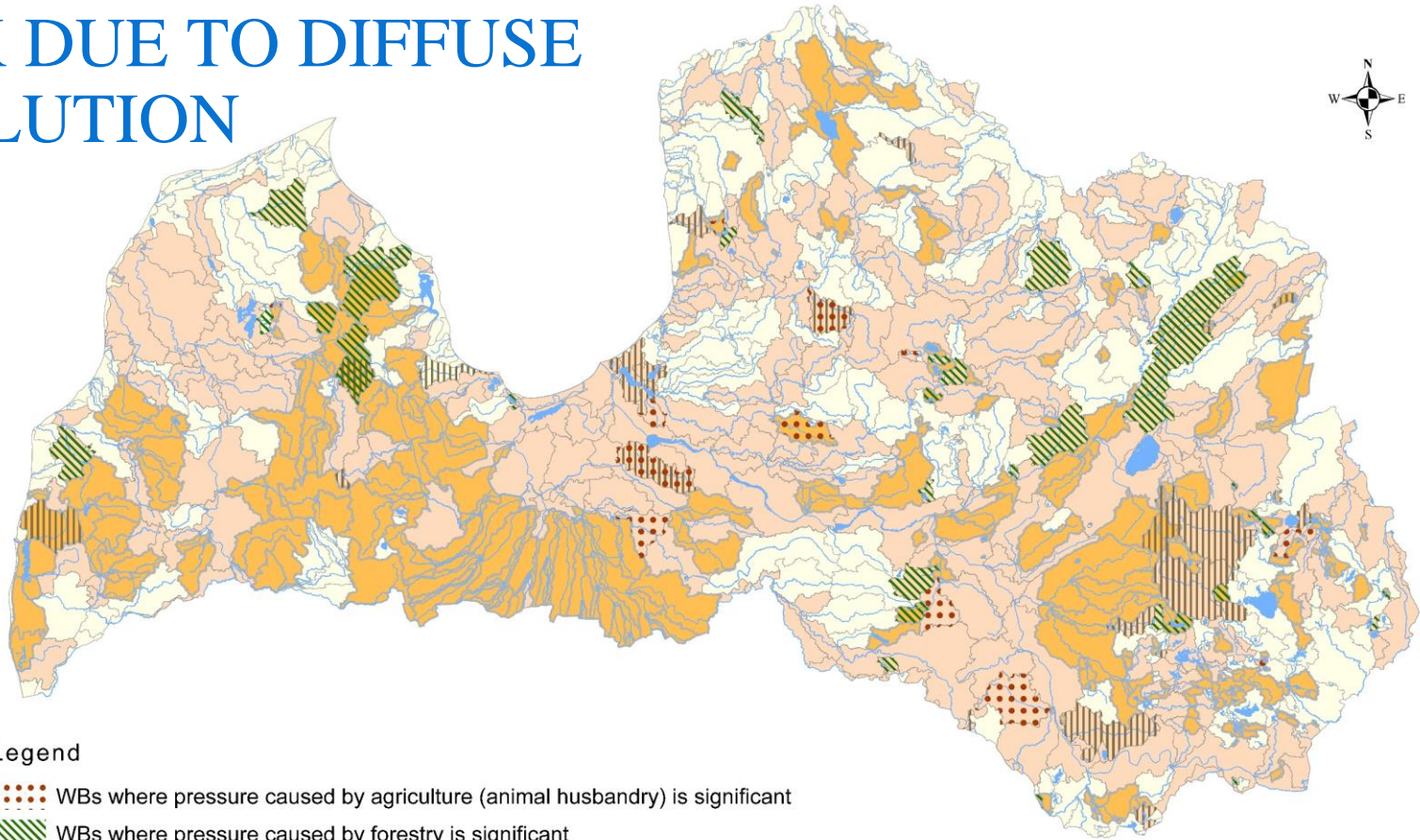
WATER BODIES AT RISK (RBMP 2022-2027)

70% of WB – at risk

Hydromorphological alterations and nutrients cause the risk for not achieving the good ecological quality in Latvian rivers and lakes



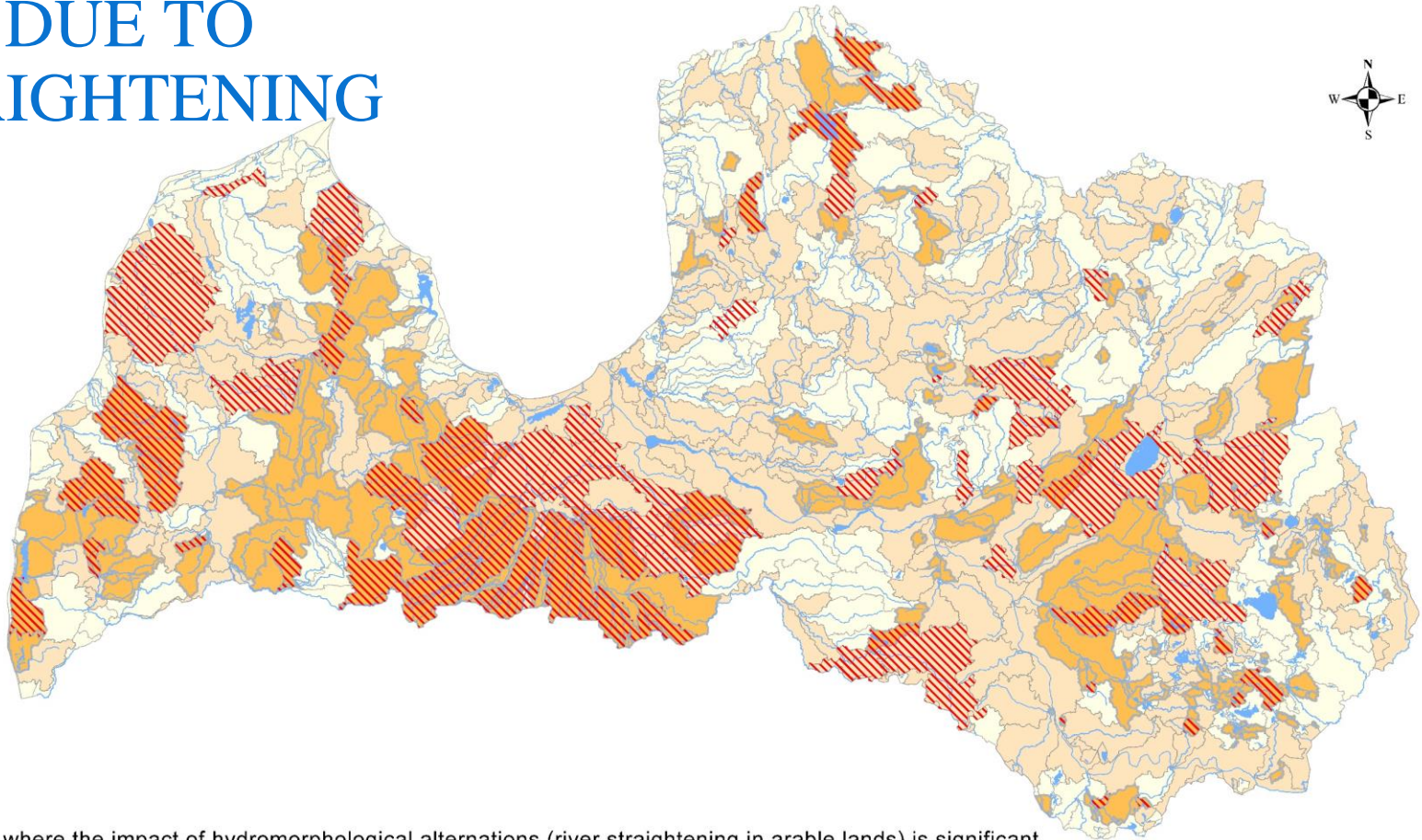
RISK DUE TO DIFFUSE POLLUTION






Legend

- WBs where pressure caused by agriculture (animal husbandry) is significant
- ▨ WBs where pressure caused by forestry is significant
- ||||| WBs where the pressure caused by people not connected to the centralized sewerage systems is significant
- WBs where pressure caused by agriculture (diffuse pollution from arable lands) is significant
- River WBs
- Lake WBs

RISK DUE TO STRAIGHTENING

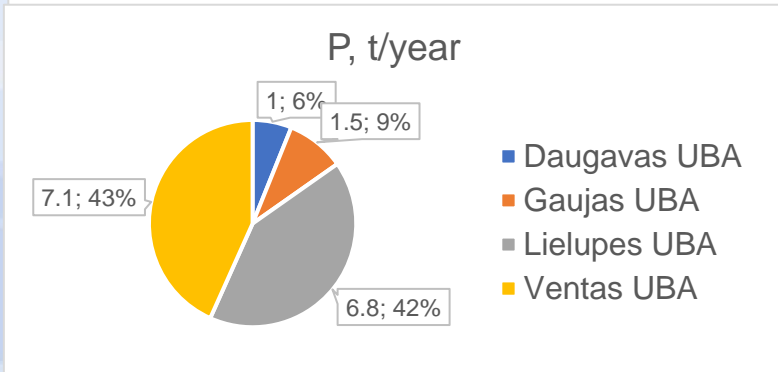
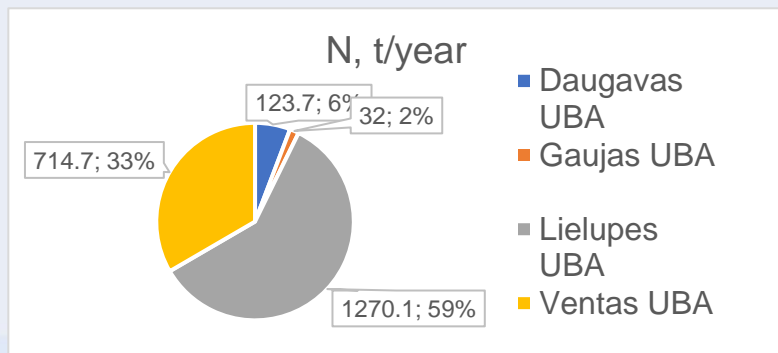


Legend

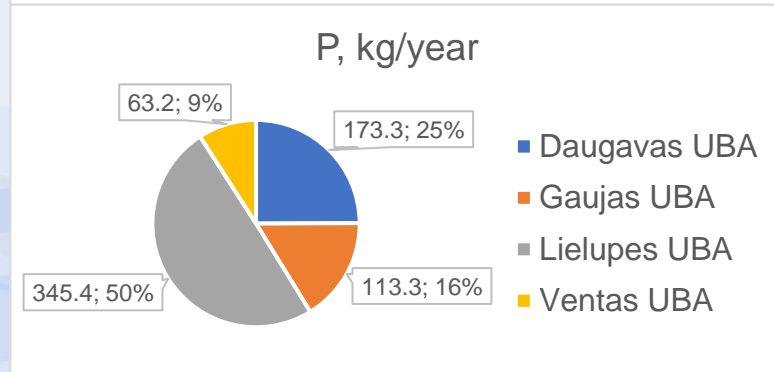
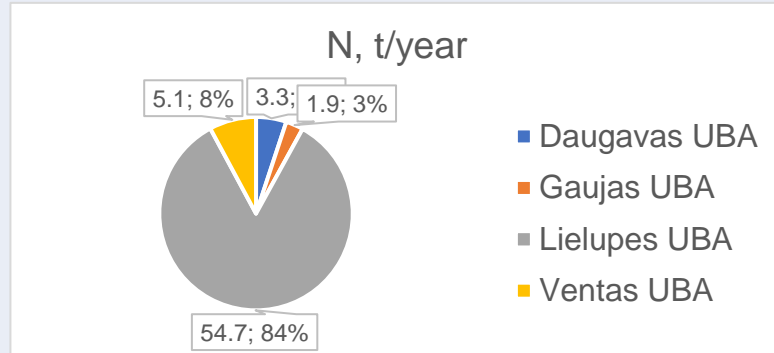
-  WBs where the impact of hydromorphological alternations (river straightening in arable lands) is significant
-  WBs where pressure caused by agriculture (diffuse pollution from arable lands) is significant
-  Waterbodies at risk

OBJECTIVES FOR NUTRIENTS

AGRICULTURAL LANDS



FOREST LANDS



MEASURES – NUTRIENTS (AGRICULTURE)

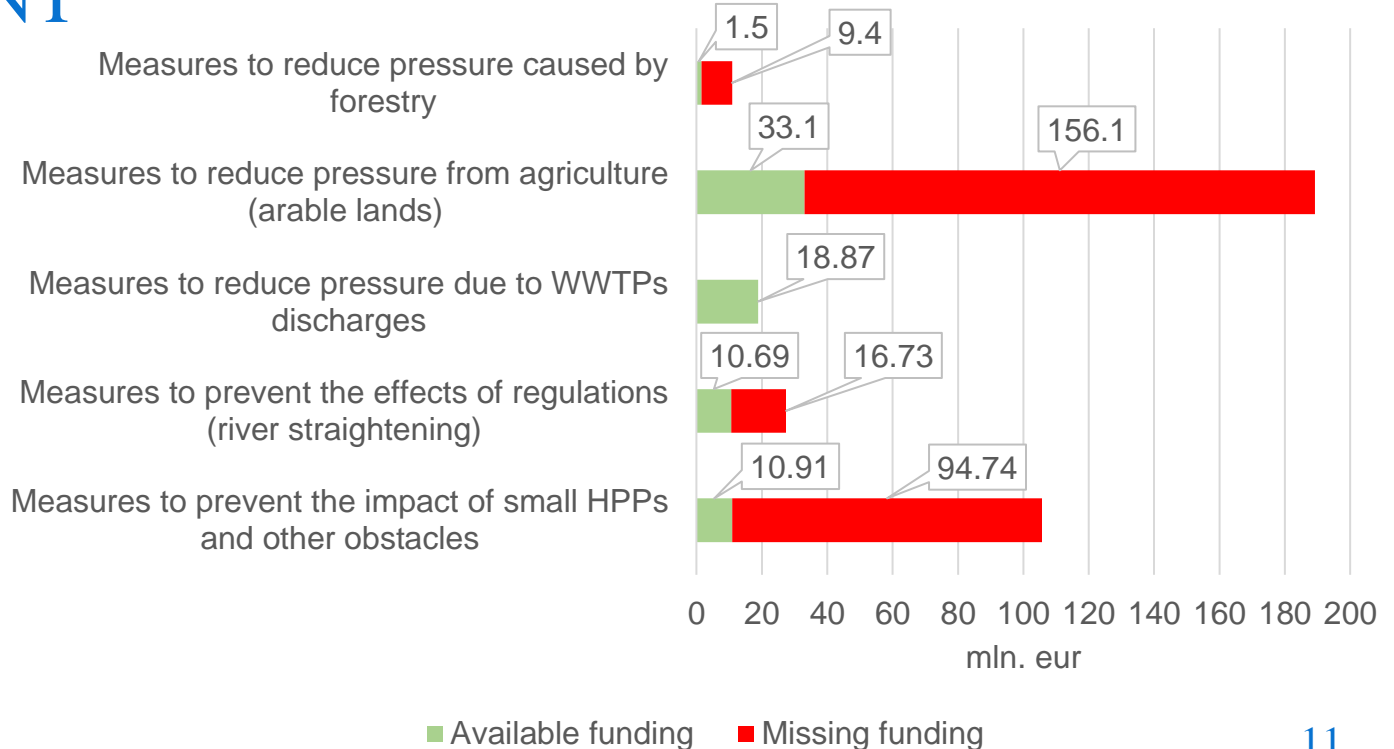
Measures	WB/ha	Costs (annual)
Establishment of perennial plantations on arable land (<i>ilggadīgie stādījumi</i>)	26 th. ha	0 EUR
Minimal tillage	154 th. ha	0 EUR
Reduction in the use of nitrogen fertilizers (20% of normal)	110 th. ha	126 th. EUR
Sedimentation ponds (agriculture)	201 th. ha*	493 th. EUR
Controlled drainage	168 th. ha*	2.8 M EUR
Artificial wetlands	197 th. ha*	7.9M EUR
Biological agriculture	25 th. ha	2.5 M EUR
Buffer zones, 6m	11 th. ha	2.4 M EUR
Survey on pressure sources and impacts	65 WB	108 th. EUR

MEASURES – STRAIGHTENING

Measures	WB/ha	Costs (annual)
Water course elements	1676 km	968 th. EUR
Monitoring for assessment of effect of water course elements; Survey for meandering rivers (with slope <1m/km);	141 th.EUR ...

ACHIEVEMENT OF OBJECTIVES

Needed and available funding for planning cycle (2022-2027) to implement measures



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The integrated project “Implementation of River Basin Management Plans of Latvia towards good surface water status” (LIFE GOODWATER IP, LIFE18 IPE/LV/000014) has received funding from the LIFE Programme of the European Union and the State Regional Development Agency Republic of Latvia. www.goodwater.lv

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